

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

111060002

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590



All Boards

REPLY TO THE ATTENTION OF:

MEMORANDUM

HSE-5J

DATE:

DEC 1 6 1991

SUBJECT:

Request for a Removal Action at the Ottawa Mercury

Site, Ottawa, LaSalle County, Illinois

Site ID# PR

FROM:

Brad Benning, On-Scene Coordinator

Emergency Response Section II

TO:

Norman Niedergang, Associate Division Director

Office of Superfund

THRU:

Robert Bowden, Chief

Emergency and Enforcement Response Branch /

I. **PURPOSE**

The purpose of this memorandum is to obtain your approval to expend up to \$168,350 to conduct a time critical removal action at the residence in Ottawa, Illinois. A removal action is necessary to eliminate the immediate threat of mercury exposure to the family and the general public which may enter their home. The proposed action would decontaminate the home to the Minimal Risk Level (MRL) established by the Agency for Toxic Substances and Disease Registry (ATSDR).

II. SITE CONDITIONS AND BACKGROUND

- Α. Site Description
- Removal site evaluation 1.

A Superfund Site Investigation (SSI) was conducted on November 13, 1991, to determine the extent of the mercury contamination in the home. The OSC and TAT personnel conducted air monitoring throughout the home, collected 10 samples, and stationed 5 air monitoring pumps in the home. Analytical results indicated levels of mercury significantly above the MRL of .0003mg/m3. family had previously evacuated the home at the recommendation of county health officials.

2. Physical location

The residence is located at Catherine Street in Ottawa, Illinois. The site is situated in a residential subdivision in the south end of Ottawa, other homes are in close proximity in all directions, an elementary school is within 300 feet of the site.

3. Site characteristics

The residence is a single family ranch with seven rooms and a basement. Eight people resided in the home: her three sons, a daughter-in-law, two grandchildren, and a boyfriend.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

On or around October 15, 1991, the two boys obtained approximately 3 to 4 ounces of metallic mercury from a neighbor's child (). The children brought the mercury in his family's garage. The children brought the mercury into the home and spilled it onto the linoleum in the boys bedroom. Mrs. attempted to collect the mercury, then vacuumed and washed the floor. The cleaning items and the vacuum cleaner bag were thrown out in the trash. The amount of mercury recovered is unknown. Sometime after the incident became ill and by November 1, 1991, was diagnosed with mercury poisoning.

5. NPL status

The site is not on the National Priority List (NPL), and is not likely to be proposed for the NPL.

6. Maps, pictures and other graphic representations

No attachments

- B. Other Actions to Date
- 1. Previous actions

There have been no actions to date by other Federal Agencies.

2. Current actions

U.S. EPA is currently working with ATSDR, State and Local officials to develope a removal action plan for the residence.

C. State and Local Authorities' Roles

1. State and local actions to date

LaSalle County Health Department became aware of the problem on November 1, 1991, when the mercury poisoning was reported by the family's doctor. On November 5, 1991, the Illinois Department of Public Health (IDPH) conducted a survey of the residence with a mercury vapor analyzer borrowed from the Illinois EPA. Based on those results the LaSalle County Health Department requested that the family leave the residence. Illinois EPA was contacted for a possible state-funded cleanup, but due to lack of resources the site was referred to the U.S. EPA.

2. Potential for continued State/local response

The IDPH will continue to be the lead agency for health related decisions, and LCHD will be the liason with the family. The IDPH contact is Kevin Marshall, and the LCHD contact is Greg Chance.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threats to Public Health or Welfare

The conditions at the Mercury site meet the criteria for a removal action as stated in the National Contingency Plan (NCP), Section 300.415(b)(2).

*Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations or the food chain.

All family members which were exposed to the mercury have been tested and found to have elevated mercury levels in their blood. Five family members have begun treatment with the drug Chemet.

B. Threats to the Environment

Contamination appears to be confined to the residence, an environmental threat has not been identified at this time.

IV. ENDANGERMENT DETERMINATION

Given the site conditions, the nature of the hazardous substances on site, and the potential exposure pathways to nearby populations described in Sections II and III above, actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Propsed action description

The removal action at the Site will include the removal and/or decontamination of household items, removal of all carpeting and linoleum, and utilization of a fixative to bind any remaining metallic mercury. Disposal options will include mercury recovery, incineration, and landfilling. Upon successful completion of the removal, the home will be returned to the property owner, postremoval site control will not be required.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants at the facility which may pose an imminent and substantial endangerment to public health and safety, and to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

2. Contribution to remedial performance

No further action is anticipated when the proposed removal action is completed.

3. Description of alternative technologies

The preferred option will be mercury recovery, low level contamination will be incinerated or landfilled if it can pass TCLP standards.

4. EE/CA

Not applicable for a time-critical removal.

5. Applicable or relevent and appropriate requirements (ARARs)

Disposal of contaminated items will comply with Resource Conservation and Recovery Act (RCRA), and work shall be conducted in accordance with the Occupational Safety and Health Act (OSHA). The Illinois Department of Public Health and the Agency for Toxic Substances and Disease Registry, (ATSDR) will determine the appropriate health based guidance. All applicable, relevant, and appropriate requirements (ARARS) will be complied with to the extent practicable.

6. Project schedule

It is estimated that the removal will require 5 ten-hour on site working days.

B. Estimated Costs

Extramural Costs:

Extramural Cleanup Contractor 20% Contingency	\$100,000 \$ 20,000
Total TAT	\$ 12,750
Subtotal, Extramural Costs	\$132,750
Extramural Costs Contingency (20% of Subtotal, Extramural Costs; round to nearest thousand)	\$ 27,000
TOTAL EXTRAMURAL COSTS	\$159,750
<u>Intramural Costs</u> :	
USEPA Direct Costs [\$30x(100 Regional hrs+ 10 HQ hrs)]	\$ 3,300
USEPA Indirect Costs (\$53x100 Regional hrs)	\$ 5,300
TOTAL INTRAMURAL COSTS	\$ 8,600
TOTAL REMOVAL PROJECT CEILING	\$168,350

EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE VI. DELAYED OR NOT TAKEN

Failure to take the proposed action at the site would pose an imminent threat of direct contact to elevated levels of mercury.

VII. OUTSTANDING POLICY ISSUES

No significant policy issues are associated with the site.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this site is contained in the Enforcement Confidential attachment. (Attachnent I)

IX. RECOMMENDATION

This decision document represents the selected removal

action for the Mercury site, in Ottawa, Illinois developed in accordance with CERCLA as amended, and not inconsistent with the NCP. This decision is based on the administrative record for the site.

Conditions at the site meet the NCP section 300.415(b)(2) criteria for a removal and I recommend your approval of the proposed removal action. The total project ceiling if approved will be \$168,350. Of this, up to \$147,000, may be used for extramural cleanup contractor costs.

APPROVE:	rdi Kraub	DATE:	12/16/91
ASSOCIATE OFFICE OF	DIVISION DIRECTOR SUPERFUND		

DATE:____

DISAPPROVE:

ASSOCIATE DIVISION DIRECTOR

ASSOCIATE DIVISION DIRECTOR OFFICE OF SUPERFUND

cc: T. Johnson, OS-210

Sheila Huff, U.S. Department of the Interior 230 South Dearborn Street, Room 3422 Chicago, IL 60604

J. Jansen, IEPA, CERCLA Coordinator

bcc: A.Baumann, HSRL-6J

R. Powers/R. Buckley, HSE-5J

R. Bowden, HSE~5J

P. Schafer, HSE-5J

L. Fabinski, HSRL-6J

O. Warnsley, HSM-5J

T. Lesser, P-19J

M. Myers, MB-19J

EERB Read File (M. Johnson)

EERB Delivery Order File (C. Brasher)

EERB Site File (Char Gwizdala, SF Central File Room)

R. Dumelle, Contracting Officer

B. Benning, On-Scene Coordinator, HSE-5J

S. Mason, Attorney, ORC, CS-3T

C. Graszer, Enforcement Specialist, HSE-5J

ATTACHMENT I

ENFORCEMENT CONFIDENTIAL INFORMATION

Redacted-information not relevant to the selection of the removal action.

ATTACHMENT II

DETAILED CONTRACTOR COST ESTIMATE

OTTAWA MERCURY SITE

PERSONNEL	\$ 50,000.00
EQUIPMENT	\$ 5,000.00
MATERIALS	\$ 5,000.00
SUBCONTRACTORS	\$ 00,000.00
TRANSPORTATION	\$ 15,000.00
DISPOSAL	\$ 25,000.00
TOTAL	\$100,000.00

ATTACHMENT III

INDEX TO THE ADMINISTRATIVE RECORD OTTAWA MERCURY SITE

DOC #	DATE	TITLE	AUTHOR	RECIPIENT	DOC
1	11/26/91	Site Assess.	Ecology & Environ.	File	Report
2	DEC 1 6 1991	Action Memo	Brad Benning	File	Memo

ATTACHMENT III

ADMINISTRATIVE RECORD

FOR OTTAWA/ MERCURY SITE

OTTAWA, ILLINOIS

December 3, 1991

DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
11/26/91	Sass, W., E & E	U.S. EPA	Site Assessment	40
00/00/00	Benning, B., U.S. EPA	Ullrich, D., U.S. EPA	Action Memorandum	